

Unit 1 Objectives and General Outline

Unit 1:

Objectives: After successful completion of this unit the student will be able to:

1. Understand the difference between precision and accuracy.
2. Convert between Standard and Scientific notation.
3. Understand the fundamental principles of the metric and SI systems.
4. Solve problems utilizing dimensional analysis and factor labeling.

A. Measurements in chemistry

1. Precision
2. Accuracy
3. Standard notation
4. Scientific notation
5. Converting
 - a. Standard notation to Scientific notation
 - b. Scientific notation to standard notation

B. SI system

1. Length
2. mass
3. volume
4. time
5. current
6. temperature
7. amount of substance

C. SI system Derived units

1. Area
2. Density
3. Pressure

D. Chemistry Problem solving

1. Dimensional Analysis
2. Factor label method
3. Handout problem solving strategies